

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB2005/050371

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04B1/69 H04L27/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04B H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| X | <p>ASKAR N K ET AL: "Spectral keying(TM): a novel modulation scheme for UWB systems" ULTRA WIDEBAND SYSTEMS AND TECHNOLOGIES, 2003 IEEE CONFERENCE ON NOV. 16-19, 2003, PISCATAWAY, NJ, USA, IEEE, 16 November 2003 (2003-11-16), pages 418-422, XP002319027 ISBN: 0-7803-8187-4 column 1 - column 4; figures 3,4</p> <p>----- -/--</p> | 1-15 |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

11 May 2005

Date of mailing of the international search report

24/05/2005

Name and mailing address of the ISA

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|--|-----------------------|
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A | <p>SABERINIA E ET AL INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "Multi-user UWB-OFDM communications" 2003 IEEE PACIFIC RIM CONFERENCE ON COMMUNICATIONS, COMPUTERS AND SIGNAL PROCESSING. (PACRIM 2003). VICTORIA, BC, CANADA, AUG. 28 - 30, 2003, IEEE PACIFIC RIM CONFERENCE ON COMMUNICATIONS, COMPUTERS AND SIGNAL PROCESSING. PACRIM, NEW YORK, NY : IEEE,, vol. VOL. 2 OF 2. CONF. 9, 28 August 2003 (2003-08-28), pages 127-130, XP010661189 ISBN: 0-7803-7978-0 abstract</p> | 1-15 |
| A | <p>US 2004/005016 A1 (TEWFIK AHMED ET AL) 8 January 2004 (2004-01-08) the whole document</p> | 1-15 |

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Information on patent family members

International Application No

PCT/IB2005/050371

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|--------------------------------------|--------------------------|
| US 2004005016 A1 | 08-01-2004 | AU 2003248843 A1 WO 2004006526 A1 | 23-01-2004 15-01-2004 |